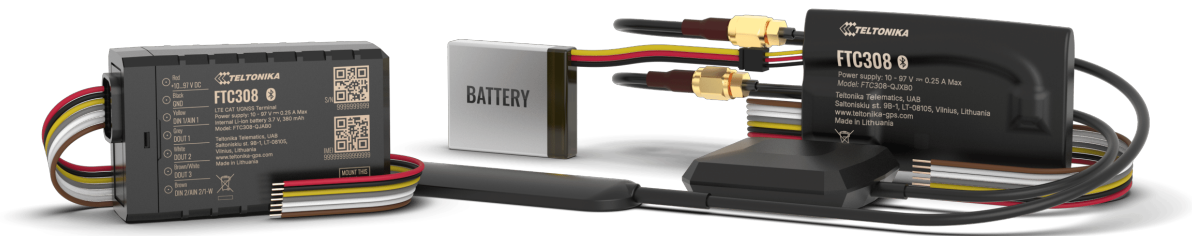




FTC308

Compact 4G LTE Cat 1 e-mobility tracker with dead reckoning and flexible installation options



2-wheeler & 3-wheeler monitoring



Industrial machinery



City utility services



Recreational vehicles monitoring

RELIABLE POSITIONING WHEN GPS IS FAILING

Dead reckoning supports precise tracking and fleet visibility when GPS is weak or jammed in dense city streets, tunnels, and underground parking

PERFECT FOR HIGH-VOLTAGE TRANSPORT AND MACHINERY

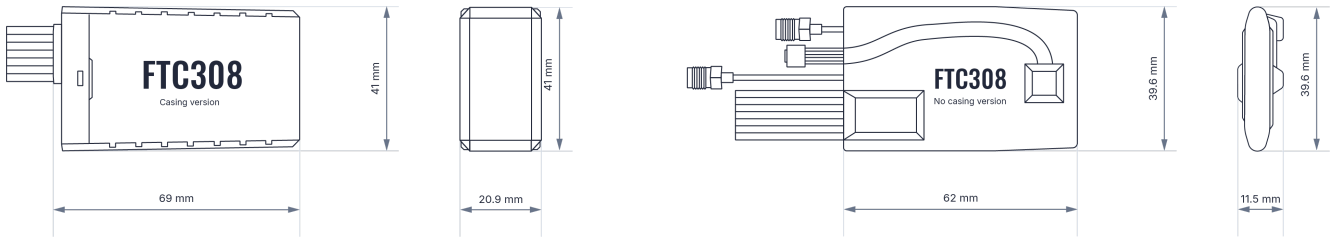
Solid 10-97 V power supply allows device integration in e-bikes, forklifts, shuttle cars, utility machinery, and other electric equipment

PROTECTION AGAINST DUST AND WATER

Robust yet small IP67-rated casing provides trusted protection against dust and resistance to water

TAILORED FOR FACTORY INSTALLATION

Unique no-casing version of FTC308 with external antenna and larger battery capacity for mounting inside e-bike and e-bicycle frames



Product

Model name	FTC308-QJAB0 FTC308-QKAB0 FTC308-QJXB0 FTC308-QKXB0
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Module

Name	FTC308-QJAB0: Quectel EG915U-EU, internal antennas, casing version FTC308-QKAB0: Quectel EG915U-LA, internal antennas, casing version FTC308-QJXB0: Quectel EG915U-EU, external antennas, external battery, no casing version FTC308-QKXB0: Quectel EG915U-LA, external antennas, external battery, no casing version
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Technology	LTE CAT 1/GSM/GPRS/GNSS/BLUETOOTH® LE
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GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU
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Receiver	L1: 75 channel
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Tracking sensitivity	-165dBm
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Position Accuracy	< 1.8 m CEP
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Velocity Accuracy	< 0.1 m/s (within +/- 15% error)
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Hot start	< 1 s
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Warm start	< 25 s
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Cellular

Technology	LTE CAT 1/GSM
2G bands	GSM: B2/B3/B5/B8
4G LTE bands	FTC308-QJAB0: LTE FDD (EG915U-EU): B1/B3/B5/B7/B8/B20/B28 FTC308-QJXB0: LTE FDD (EG915U-EU): B1/B3/B5/B7/B8/B20/B28 FTC308-QKAB0: LTE FDD (EG915U-LA): B2/B3/B4/B5/B7/B8/B28/B66 FTC308-QKXB0: LTE FDD (EG915U-LA):B2/B3/B4/B5/B7/B8/B28/B66
Data transfer	LTE FDD (CAT 1): Max. 10 Mbps (DL) / Max. 5 Mbps (UL) GSM (GPRS): Max. 85.6 Kbps (DL) / Max. 85.6 Kbps (UL)
Transmit power	Class 4 for GSM900: 33 dBm ± 2 dB Class 1 for DCS1800: 30 dBm ± 2 dB Class 3 for LTE-FDD: 23 dBm ± 2 dB
Data support	SMS (TEXT, PDU), Network protocols (TCP, UDP)

Power

Input voltage range	10 - 97 V DC
Internal Back-up battery	Casing version: 380 mAh Li-ion battery 3.7 V (1.41 Wh) No casing version: 1200 mAh Li-ion battery 3.7 V (4.44 Wh)(External)* *Possibility to use larger capacity external battery
Internal fuse	3 A
Power consumption	At 12V < 35 mA (Nominal with no load) At 12V < 0.25 A Max (with full Load/Peak)

Bluetooth® Technology

Specification	5.3 + LE* *EYE sensors and EYE beacons support
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Physical specification

Dimensions	Casing version: 69 x 41 x 20.9 mm (L x W x H) No casing version: 62 x 39.6 x 11.5 mm (L x W x H)
Weight	Casing version: 75 g No casing version (with accessories): 125 g

Operating environment

Operating temperature	-30 °C to +85 °C
Storage temperature	-30 °C to +85 °C
Operating humidity	65 ± 20% non-condensing
Ingress Protection Rating	Casing version: IP67 No casing version: N/A
Battery charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage conditions	Casing version: -10 °C to +25 °C for 3 or more months No casing version: -20 °C to +45 °C for 3 or more months

Interface

Digital Inputs	2
Digital Outputs	3
Analog Inputs	2
1-Wire	1
GNSS antenna	Casing version: Internal High Gain No casing version: External (SMA female connector)
Cellular antenna	Casing version: Internal High Gain No casing version: External (RP SMA female connector)
USB	2.0 USB Type-C
LED indication	2 status LED lights
SIM	Nano-SIM or eSIM* *eSIM soldering is available upon specific request
Memory	128MB internal flash memory

Data codec

Codec support	Codec 8 Extended
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Features

Sensors	Accelerometer and Gyroscope
Scenarios	Green Driving, Over Speeding detection, Network Jamming detection, Unplug detection, Crash detection, Private/Business mode, Trip, Odometer, Excessive idling, Immobilizer, Auto Geofence, Manual Geofence, Towing detection, Fall Down detection, Static navigation, Custom scenarios, Ignition ON counter
Sleep modes	Online sleep, Deep sleep, Power off sleep
Configuration and firmware update	FOTA WEB, Telematics Configuration Tool (TCT)
Time Synchronization	GNSS, NITZ, NTP
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage